

### **REMARKS/ARGUMENTS**

This Amendment accompanies a Request for Continued Examination (RCE) and addresses issues raised in the Official Action of July 28, 2009, a Final Rejection.

The specification has been amended responsive to the examiner's comments in item 1 (the first item 1) on page 2 of the Office Action. Claims 17-19 have been amended to address items 1-3 in the rejection bridging pages 2 and 3 of the Official Action. Claims 1-21, all pending claims, stand rejected as allegedly being "obvious" and therefore unpatentable over a combination of six separate documents. The observations included in the Amendment and response of April 25, 2009 concerning a large number of cited documents indicating itself non-obviousness is incorporated by reference herein.

Page 10 of the Action seems to argue that casein is similar to gelatine. This is untrue. Casein and gelatine do have different molecular structures and therefore it is not obvious that these compounds are exchangeable.

**Casein** is a globular protein without a secondary and tertiary protein structure.

*Definition from Wikipedia:* "Globular proteins or spheroproteins are one of the three main protein classes, comprising "globe"-like proteins that are more or less soluble in aqueous solutions (where they form colloidal solutions). This main characteristic helps distinguishing them from fibrous proteins (the other class), which are practically insoluble."

Furthermore, casein has a higher amount of lysine and glutamic acid and casein-based films have a lower water vapor transmission rate, water gain at different conditions and higher tensile strength compared to gelatine-based films. As evidence of this *see* the attached article from the Journal of Applied Polymer Science, Vol. 88, 64-71 (2003), in the abstract.

**Gelatine** is a fibrous protein having a triple helix structure and therefore it has a secondary and tertiary structure.

*Definition from Wikipedia:* "They (=fibrous proteins) form long protein filaments, rod-or wire-like shapes. They are usually inert structural or storage proteins. They are generally water-insoluble and are found as an aggregate due to hydrophobic R groups that stick out of the molecule. The amino acid sequences they are made from often have limited residues with repeats. These can form unusual secondary structures, e.g. collagen triple helix. The structures

often contain ‘cross-links’ between chains, for example cys-cys disulfide bonds between keratin chains.”

The primary reference to Schneider is quite clear in preferring gelatin and teaching away from the use of other materials, in particular casein. *See* the discussion at column 3, lines 5-8 in which Schneider indicates casein-containing products “which are not very suitable”. Clearly this constitutes the teaching away of the use of casein.

An important consideration in determining obviousness is “teaching away” from the claimed invention by the prior art. *In re Dow Chemical Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988). A reference teaches away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. A reference will teach away if it suggests that the line of development flowing from the reference’s disclosure is unlikely to be productive of the result sought by the applicant. *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994); *see also KSR*, 127 S. Ct. at 1739–40 (2007) explaining that when the prior art teaches away from a combination, that combination is more likely to be nonobvious.

So, taking all these significant differences into account and the differences already mentioned in the earlier replies (such as the teaching away of Schneider) the rejection is not technically well founded.

Therefore it is not obvious that a person skilled in the art, working with these kinds of proteins would have ignored the fact of the molecular differences (which includes different properties and chemical behavior) and the fact that Schneider et al taught that casein is not suitable.


Claims 1, 12-14, 16 and 17 are *provisionally* rejected on the ground of non-statutory obviousness-type double patenting based upon various claims contained in co-pending application Serial No. 10/551,197. It is counsel’s understanding that the referenced pending application has not yet been allowed, nor of course has the present one. Applicants will hold a full and complete response to this provisional rejection in abeyance until such time as one or both applications contain allowable subject matter.

Reconsideration and favorable action are solicited.

FUNDA et al  
Appl. No. 10/564,635  
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Respectfully submitted,

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